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# (12) UK Patent Application (19) GB (11) 2 146 367 A

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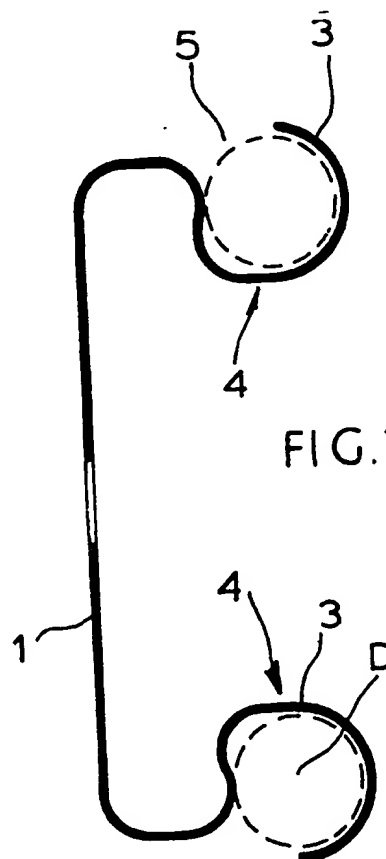
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(54) Channel section for rooms of buildings

(57) A building component 2 comprises an elongate channel section 1, the flanks of which have elongate end portions 3 configured to provide a restricted entrance 4 to the channel portion. The end portions 3 may be shaped to receive plaster. The channel portion may be provided in combination with a further portion (6, Fig. 2) of the building component whose end fits in and behind the restricted entrance to the channel portion and is formed with a central recess extending outside the entrance so that the legs (7, Fig. 2) of the further portion on either side of the recess can be flexed towards each other to allow the further component to be inserted into and withdrawn from the restricted entrance. To camouflage any joint between the channel portion and adjacent materials, at least one side of the further portion may extend laterally beyond the channel portion.



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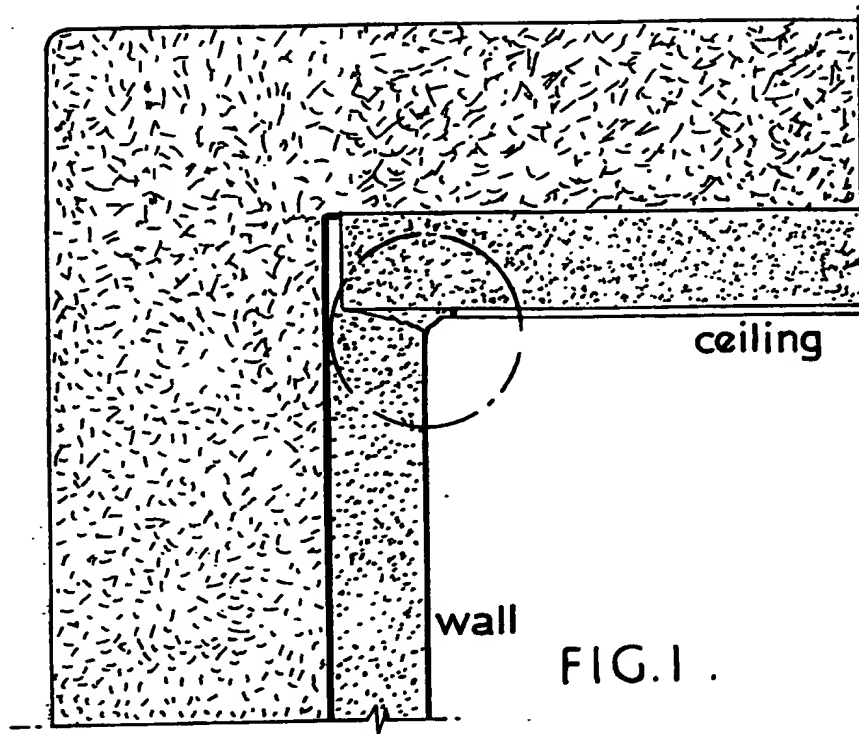
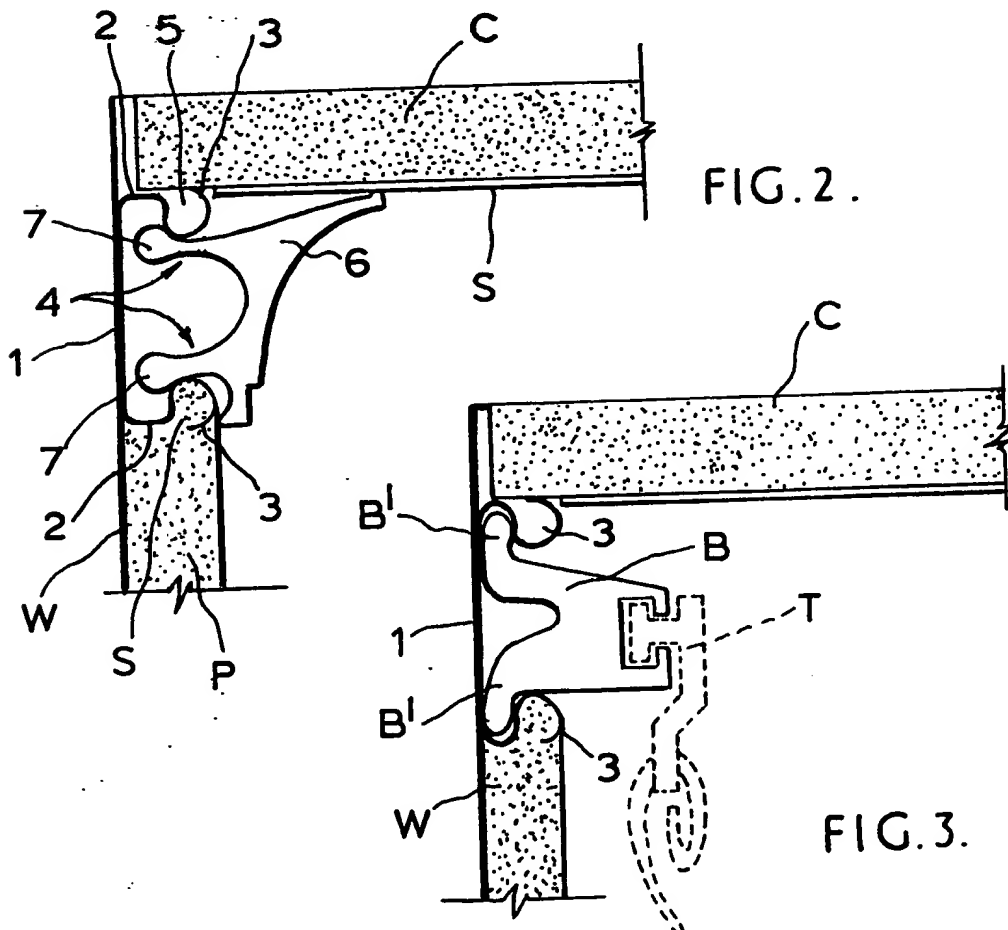
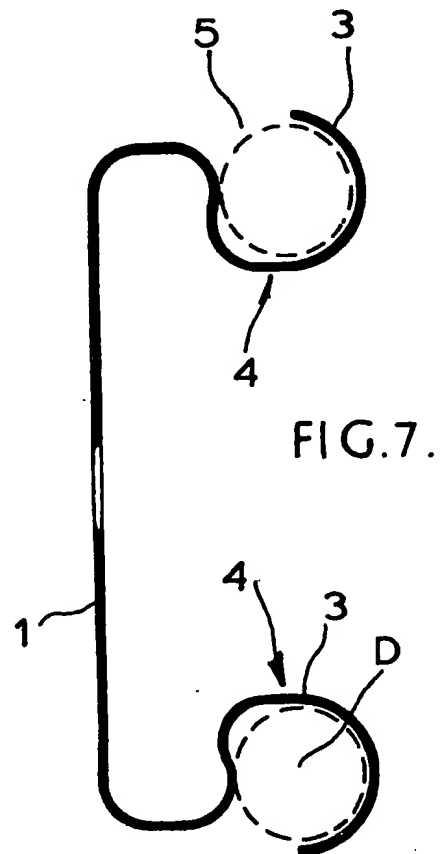
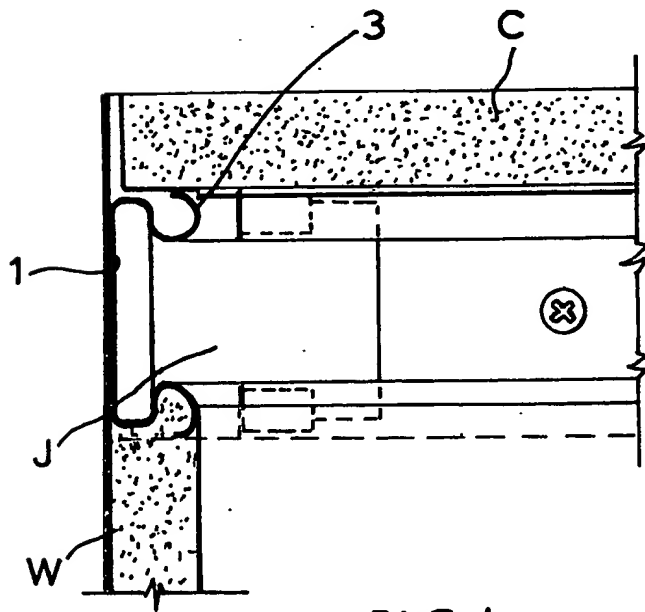
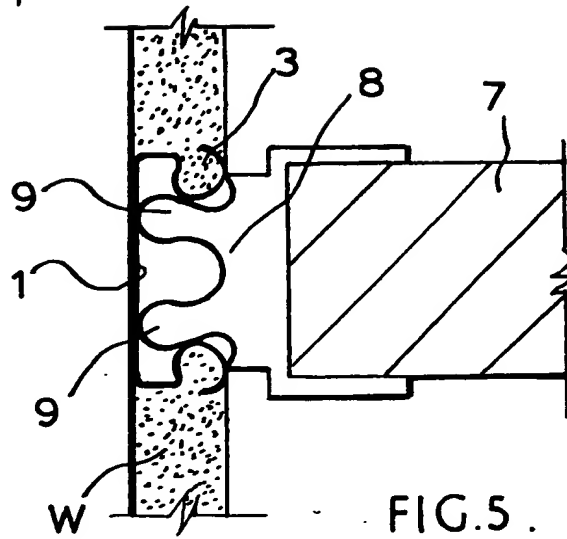
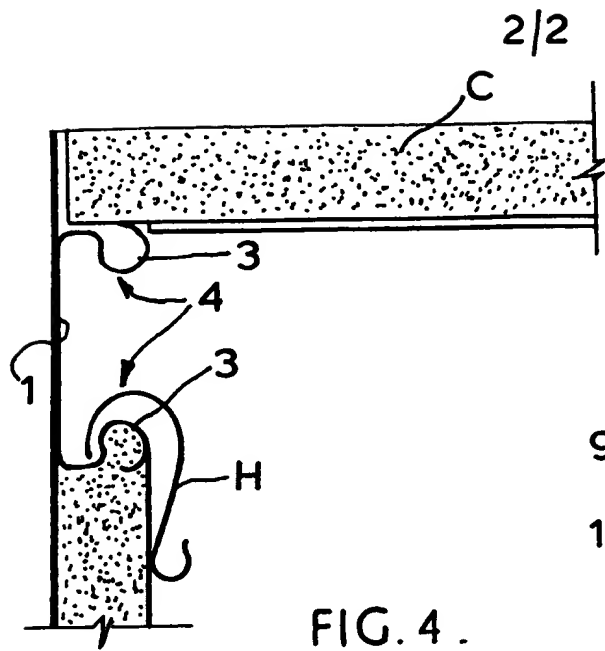


FIG. 1.





## SPECIFICATION A Building Component

The present invention relates to a building component.

It is practical experience, using certain modern day structural techniques, that the junctions between the vertical walls of a room and the ceiling are prone to the rapid appearance of unsightly cracks caused *inter alia*, by thermal effects or vibrational movements of the ceiling and walls. The diminished aesthetics which result, may be minimised by the introduction of a definite shadow groove or recess in the plaster adjoining the ceiling. This requires that the wall be plastered to a good line to form the shadow groove, which slows work and adds to cost.

As to the solving of this problem that the present invention is primarily directed, although in so doing, the invention provides a number of side advantages and applications which will become apparent from this disclosure.

According to one aspect of the invention there is provided a building component comprising an elongate channel portion the flanks of which have elongate end portions configured to provide a restricted entrance to the channel portion, said end portions providing receiving means for plaster and the like to key the component therein.

One advantage of the above arrangement is that the component can be attached *via* the base of the channel portion to a wall of a room with one of its flanks aligned along and adjacent the ceiling of the room, and plaster can then be speedily applied to the wall up to the other flank of the component, with plaster entering the receiving means of the end portion of that flank, thereby to provide a neat plastering line along the length of the component. The shadow groove so formed by the component, is of neater appearance than the rough and ready methods heretofore employed. Moreover the arrangement minimises the effects of plaster damage due to thermal, moisture or vibrational effects.

The end portions are advantageously in the form of hollow bulbous ridges, extending along the length of the flanks of the channel portion, with longitudinal openings to the bulbous ridges adjacent the flanks, to allow plaster to enter. The bulbous ridges also provide the restricted entrance to the channel portion with the attendant capability of receiving a range of snap-in or turnbuckle constructional accessories, such as cornice work and curtain track support brackets, thereby avoiding the traditional messier and time consuming methods using adhesives and screws.

The invention will now be described by way of example with reference to the accompanying drawings wherein:

Figure 1 is a sectional detail of a typical junction formed between a plastered wall and ceiling according to prior art, the ceiling comprising plasterboard coated with a thin plaster skim of plaster and skim;

Figure 2 is a similar view to that of Figure 1 but

utilising a building component, according to the present invention, at the junction between walls and ceiling, and to which is secured a cornice bead;

Figure 3 is a view similar to Figure 2 illustrating the invention as used to secure a curtain track;

Figure 4 is a view similar to Figure 3 with the invention employed as a picture rail to support a picture hook;

Figure 5 is a part plan view illustrating the use of the invention to form the junction between a partition wall and a main bearing wall;

Figure 6 is a section/elevation of the junction between two walls and the ceiling of a room, illustrating one means of forming an in situ connection between a pair of building components according to the invention, at that junction; and

Figure 7 is a sectional view through a component according to the invention, illustrating a means of joining one component to another to form a butt joint.

With reference to the drawings, Figure 1 illustrates the problem with present day techniques in forming a junction between a plastered wall and a plaster or plaster skimmed plasterboard ceiling, wherein it can be seen that the junction is often irregular and prone to the appearance of cracks caused, for example, by thermal effects, moisture effects or ceiling vibrations.

A method of surmounting this problem to some extent, is to deliberately leave a gap between the upper extent of the wall plaster and the ceiling, so forming a shadow groove. It will be understood that this method, howsoever being partially effective, is not so easy to achieve, or at least slows down the plastering process, due to the problem of providing a good plaster line forming the base of the shadow groove.

A building component according to the invention, for overcoming this problem, is shown in Figure 2, in an actual application. It comprises an elongate channel portion 1, the flanks 2 of which terminate in longitudinal hollow bulbous ridges 3, configured to provide a restricted entrance 4 to the channel portion 1.

The configuration of the bulbous ridges 3 is such that they provide receiving means for plaster, and to this end have longitudinal slit-like openings 5, adjoining the flanks 2 of the channel portion 1.

In the Figure 2 embodiment, the building component of the invention, has been employed in its primary application to eliminate or, at least, considerably minimise, the cracking and irregular junction problems illustrated in Figure 1. It will be seen that in this application one flank 2 of the channel portion 1 is positioned adjacent the base plaster or plasterboard of a ceiling C, prior to the plaster skim S being applied, and before plaster P is applied to the wall W.

The component, a series of such components but joined together depending on the dimension of the room, is then secured to the wall W by suitable means (not shown), and plaster P is applied to the wall W to fill the bulbous portions 3, and to extend flush with the outermost extent of the bulbous portions 3. Plastering using this method is

extr mely speedy, and provides a g d rectilinear edge to form the base f the required shadow groove.

The action of the plast r entering th bulbous ridge 3 of the lower flank of the building component, acts to assist in keying the component to the plaster at this point, and since the opposing bulbous ridge 3 abuts the ceiling, and is not filled with plaster, it will be allowed to flex under ceiling vibration or other movement thereof, so absorbing these movements and reducing considerably the formation of plaster fractures.

The ancilliary usefulness of the invention has been illustrated in one aspect in Figure 2. Thus, were it desired to erect cornice work, typical cornice beads such as 6 are provided with a pair of spaced prongs 7 flexible enough to be snap-fit inserted through the restricted entrance provided by the bulbous portions 3, to engage the channel portion 1 and provide a secure attachment.

In contrast to prior methods, where such cornice work has to be permanently affixed in position, with the present invention is subsequent removable capability is possible which, of course, is of considerable advantage. Performing the technique is also much speedier and less costly than known methods.

Similarly, the building component, so positioned at the junction between the walls and ceiling of a room, can be used to mount a curtain track as shown in Figure 3, in the form of a continuous extrusion comprising a track T and brackets B (or alternatively stub brackets and a separate track) the brackets B being provided with spaced flexible prongs B', push-fit inserted through the restricted entrance of the component provided by the bulbous portions 3.

A further alternative use of the invention is shown in Figure 4 where the building component is functioning as a picture rail for supporting a picture hook H.

In the application shown in Figure 5, the building component of the invention has been employed to erect a partition wall 7. The component itself, or a series of components, is fastened vertically at the required position along a main bearing wall M and plastered in in this position as shown. A junction piece 8 is then provided for retaining one end of the main partition 7, this junction piece 8 having a pair of flexible prongs 9 so arranged for snap-fit insertion through the restricted entrance provided by the bulbous portions 3 of the channel portion 1. In this construction, differential or vibrational movement between the partition wall 7 and main bearing wall W is absorbed in the fixing 8, so eliminating plaster damage at the junction between the two, while at the same time maintaining good acoustic insulati n.

Figure 6 illustrates a means for completing the run of a pair of adjoining building comp n nts, according to th inv nti n, at a corn r juncti n between tw walls. Instead of mitering th adjacent ends of the c mpon nts, they are left spaced a short distance apart and a corner junction bl ck J is

provided at this positi n as shown. The junction block J plugs int each of th nds of the adjacent building components, with a slid fit to give linability and lateral tolerance. The face of th block J is recessed t maintain visual continuity.

A method of butt jointing the building components where several require to be erected to complete a particular run, is shown in Figure 7. This is simply effected by the use of slide-fit dowels D bridging adjoining bulbous ridges 3 of the components. When necessary the dowels D can be slid over into the closed position with the channels virtually in their final position by using a small hooked tool (not shown).

Several typical uses of the invention have been illustrated above, but these are not exhaustive, and other applications may be envisaged, for example, fixings for light duty protection strips, skirtings and architraves. As compared to the normal methods of nailing, screwing or gluing, the invention has considerable advantages.

Turnbuckle clips would be used where the snap-in fixing of the accessories above described, is inadequate. The base plate of the turnbuckle would be secured to the back face of the item to be fixed, for example, an architrave. When the item is in position the pivoted back bar of the turnbuckle would be rotated by an integral lever to lock behind the bulbous ridges 3.

The building component may be formed of metal or plastics, galvanised or may have coloured treatment. Similar considerations apply to the various attachments which can be fitted to a component in use.

#### CLAIMS

1. A building component comprising an elongate channel portion, the flanks of which have elongate end portions configured to provide a restricted entrance to the channel portion and a second portion having one end adapted to fit in and behind the restricted entrance of the channel portion, said end being formed with a central recess extending beyond the channel portion when said further portion is fitted in the channel portion.

2. A building component as claimed in Claim 1 wherein the further portion extends laterally beyond at least one side of the elongate channel portion.

3. A component as claimed in either Claim 1 or 2 wherein said portions of the elongate channel portion provide receiving means for plaster and the like to key the component therein.

4. A building component comprising an elongate channel portion, the flanks of which have elongate end portions configured to provide a restricted entrance to the channel portion, said end portion providing receiving means for plaster and the like to key the component th rein.

5. A building comp nent as claim d in 3 or claim 4 wherein said end portions ar bulbous holl w ridges.

6. A building component as claimed in any one of th preceding claims wherein the elongat chann l p rti n is form d of metal.

7. A building component substantially  
hereinbefore described with reference to and as

illustrated in any one of figures 2 to 7 of the  
accompanying drawings.

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